

63. An isolated antibody which specifically binds to a polypeptide selected from the group consisting of:

- a) a polypeptide comprising an amino acid sequence of SEQ ID NO:1-9,
- b) a polypeptide comprising a naturally occurring amino acid sequence at least 90% identical to an amino acid sequence of SEQ ID NO:1-9, said naturally occurring amino acid sequence having protein kinase activity, and
- c) an immunogenic fragment of a polypeptide having an amino acid sequence of SEQ ID NO:1-9.

64. The antibody of claim 63 which specifically binds to a polypeptide comprising an amino acid sequence of SEQ ID NO:1-9.

65. The antibody of claim 63 which specifically binds to a polypeptide comprising a naturally-occurring amino acid sequence at least 90% identical to an amino acid sequence of SEQ ID NO:1-9, said naturally occurring amino acid sequence having protein kinase activity.

66. A diagnostic test for a condition or disease associated with the expression of PKH in a biological sample, the method comprising:

- a) combining the biological sample with an antibody of claim 63, under conditions suitable for the antibody to bind the polypeptide and form an antibody:polypeptide complex, and
- b) detecting the complex, wherein the presence of the complex correlates with the presence of the polypeptide in the biological sample.

67. The antibody of claim 63, wherein the antibody is:

- a) a chimeric antibody,
- b) a single chain antibody,
- c) a Fab fragment,

- d) a F(ab')₂ fragment, or
- e) a humanized antibody.

68. A composition comprising an antibody of claim 63 and an acceptable excipient.

69. A method of diagnosing a condition or disease associated with the expression of PKH in a subject, comprising administering to said subject an effective amount of the composition of claim 68.

70. A composition of claim 68, wherein the antibody is labeled.

71. A method of diagnosing a condition or disease associated with the expression of PKH in a subject, comprising administering to said subject an effective amount of the composition of claim 70.

72. A method of preparing a polyclonal antibody with the specificity of the antibody of claim 63, the method comprising:

- a) immunizing an animal with a polypeptide having an amino acid sequence of SEQ ID NO:1-9 or an immunogenic fragment thereof, under conditions to elicit an antibody response,
- b) isolating antibodies from said animal, and
- c) screening the isolated antibodies with the polypeptide, thereby identifying a polyclonal antibody which binds specifically to a polypeptide having an amino acid sequence of SEQ ID NO:1-9.

73. A polyclonal antibody produced by a method of claim 72.

74. A composition comprising the polyclonal antibody of claim 73 and a suitable carrier.

75. A method of making a monoclonal antibody with the specificity of the antibody of claim 63, the method comprising:

- a) immunizing an animal with a polypeptide having the amino acid sequence of SEQ ID NO:1-9 or an immunogenic fragment thereof, under conditions to elicit an antibody response,
- b) isolating antibody producing cells from the animal,
- c) screening the isolated antibodies with the polypeptide, thereby identifying a monoclonal antibody which binds specifically to a polypeptide having an amino acid sequence of SEQ ID NO:1-9.

76. A monoclonal antibody produced by a method of claim 75.

77. A composition comprising the monoclonal antibody of claim 76 and a suitable carrier.

78. The antibody of claim 63, wherein the antibody is produced by screening a Fab expression library.

79. The antibody of claim 63, wherein the antibody is produced by screening a recombinant immunoglobulin library.

80. A method of detecting a polypeptide having an amino acid sequence of SEQ ID NO:1-9 in a sample, the method comprising:

- a) incubating the antibody of claim 63 with a sample under conditions to allow specific binding of the antibody and the polypeptide, and
- b) detecting specific binding, wherein specific binding indicates the presence of a polypeptide having an amino acid sequence of SEQ ID NO:1-9 in the sample.

81. A method of purifying a polypeptide having an amino acid sequence of SEQ ID NO:1-9 from a sample, the method comprising:

- a) incubating the antibody of claim 63 with a sample under conditions to allow specific binding of the antibody and the polypeptide, and
- b) separating the antibody from the sample and obtaining the purified polypeptide having an amino acid sequence of SEQ ID NO:1-9.